

Title (en)
Cucurbita plant resistant to potyvirus

Title (de)
Gegenüber Potyvirus resistente Kürbispflanze

Title (fr)
Plante cucurbita résistante aux potyvirus

Publication
EP 2514304 A1 20121024 (EN)

Application
EP 11163208 A 20110420

Priority
EP 11163208 A 20110420

Abstract (en)
The present invention relates to a Cucurbita plant, in particular a squash plant, having wide spectrum resistance to potyvirus such as Zucchini Yellow Mosaic Virus (ZYMV), Watermelon Mosaic Virus (WMV), Papaya Ringspot Virus (PRSV) and Moroccan watermelon mosaic virus (MWMV). Methods of selecting a squash plant having wide spectrum potyvirus resistance by marker assisted breeding are also provided.

IPC 8 full level
A01H 5/08 (2018.01)

CPC (source: EP US)
A01H 5/08 (2013.01 - EP US); **C12N 15/8283** (2013.01 - US); **C12Q 1/6895** (2013.01 - EP US); **C12Q 2600/13** (2013.01 - EP US); **C12Q 2600/156** (2013.01 - EP US)

Citation (applicant)

- WO 9001069 A1 19900208 - SEGEV DIAGNOSTICS INC [US]
- WARD, SHUKLA, INTERVIROLOGY, vol. 32, 1991, pages 269 - 296
- SMITH, WATERMAN, ADVANCES IN APPLIED MATHEMATICS, vol. 2, 1981, pages 482 - 489
- W.R. PEARSON, METHODS IN ENZYMOLOGY, vol. 183, 1990, pages 63 - 9A, Retrieved from the Internet <URL:http://workbench.sdsc.edu>
- TIJSSEN: "Laboratory Techniques in Biochemistry and Molecular Biology-Hybridization with Nucleic Acid Probes", 1993, ELSEVIER, article "Overview of principles of hybridization and the strategy of nucleic acid probe assays"
- MULLIS ET AL., COLD SPRING HARBOR SYMP. QUANT. BIOL., vol. 51, 1986, pages 263 273
- BARANY, PROC. NATL. ACAD. SCI.(U.S.A), vol. 88, 1991, pages 189 193
- LANDEGREN ET AL., SCIENCE, vol. 241, 1988, pages 1077 - 1080
- NICKERSON ET AL., PROC. NATL. ACAD. SCI.(U.S.A.), vol. 87, 1990, pages 8923 - 8927
- WU ET AL., GENOMICS, vol. 4, 1989, pages 560 569

Citation (search report)

- [X] WO 2007030356 A2 20070315 - SEMINIS VEGETABLE SEEDS INC [US], et al
- [X] BROWN REBECCA N ET AL: "Inheritance of resistance to four cucurbit viruses in Cucurbita moschata", EUPHYTICA, vol. 129, no. 3, 1 January 2003 (2003-01-01), KLUWER ACADEMIC PUBLISHERS, NL, pages 253 - 258, XP002542100, ISSN: 0014-2336, DOI: 10.1023/A:1022224327064
- [Y] PARIS HARRY S ET AL: "The genes of pumpkin and squash", HORTSCIENCE, vol. 40, no. 6, October 2005 (2005-10-01), pages 1620 - 1630, XP009153389, ISSN: 0018-5345
- [Y] GILBERT-ALBERTINI F ET AL: "Resistance of Cucurbita moschata to watermelon mosaic virus type 2 and its genetic relation to resistance to zucchini yellow mosaic virus", EUPHYTICA, vol. 69, no. 3, 1993, pages 231 - 237, XP009153381, ISSN: 0014-2336
- [Y] BLANCA JOSE ET AL: "Transcriptome characterization and high throughput SSRs and SNPs discovery in Cucurbita pepo (Cucurbitaceae)", BMC GENOMICS, vol. 12, February 2011 (2011-02-01), XP002662299, ISSN: 1471-2164
- [A] SITTERLY W R: "Breeding for disease resistance in cucurbits", ANNUAL REVIEW OF PHYTOPATHOLOGY, vol. 10, 1 January 1972 (1972-01-01), ANNUAL REVIEWS INC, US, pages 471 - 490, XP002542101, ISSN: 0066-4286, DOI: 10.1146/ANNUREV.PY.10.090172.002351

Cited by
CN113881801A; CN104560961A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2514304 A1 20121024; AU 2012244737 A1 20131024; AU 2012244737 B2 20170518; CA 2833472 A1 20121026; CA 2833472 C 20230711; CN 103501593 A 20140108; CN 103501593 B 20170208; EP 2699080 A1 20140226; IL 228865 A0 20131231; IL 228865 B 20180430; JP 2014513942 A 20140619; JP 2017143833 A 20170824; JP 6209510 B2 20171004; JP 6389295 B2 20180912; MA 35599 B1 20141101; MX 2013012018 A 20131210; MX 349001 B 20170706; US 10351874 B2 20190716; US 10717987 B2 20200721; US 11186846 B2 20211130; US 2014115735 A1 20140424; US 2019309320 A1 20191010; US 2020299718 A1 20200924; WO 2012143391 A1 20121026; ZA 201307478 B 20160727

DOCDB simple family (application)
EP 11163208 A 20110420; AU 2012244737 A 20120418; CA 2833472 A 20120418; CN 201280018999 A 20120418; EP 12717093 A 20120418; EP 2012057075 W 20120418; IL 22886513 A 20131014; JP 2014505600 A 20120418; JP 2017049075 A 20170314; MA 36416 A 20131111; MX 2013012018 A 20120418; US 201214112657 A 20120408; US 201916437632 A 20190611; US 202016896358 A 20200609; ZA 201307478 A 20131007